IRON AGE

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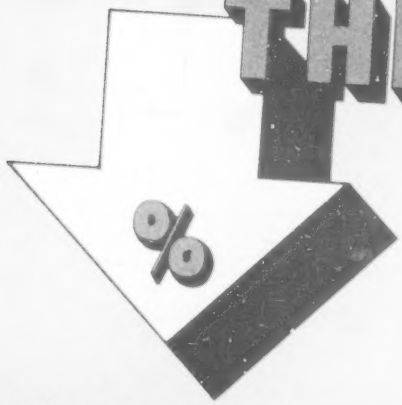
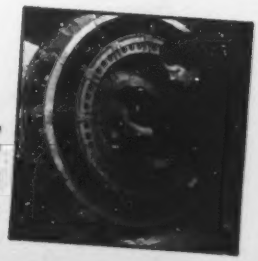
OCTOBER 3, 1986

MANUFACTURING MANAGEMENT

ARE INTEREST & RATES THE DOLLAR MANUFACTURING'S BEST HOPE?



Titanium, Stainless and Superalloys: Battle for the High-Performance Market



OCTOBER 3, 1986 VOL. 229, NO. 19

IRON AGE
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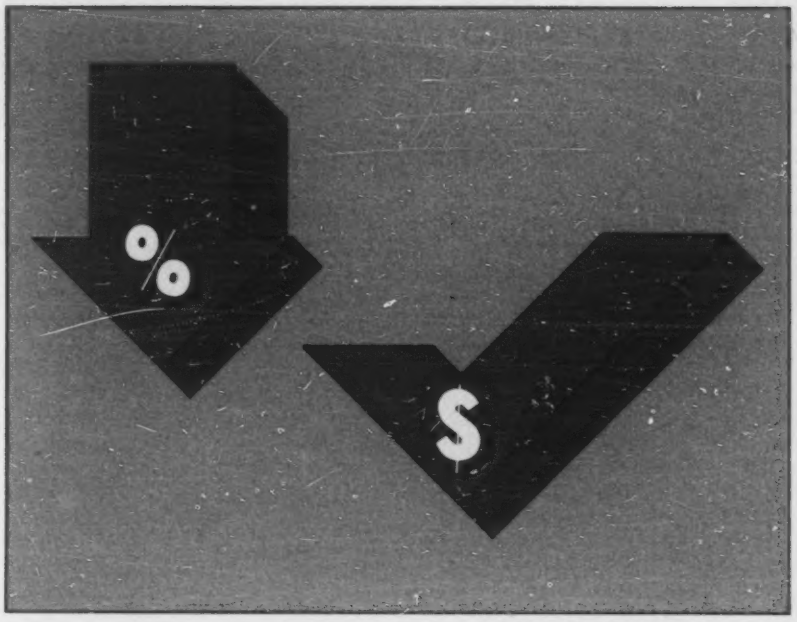

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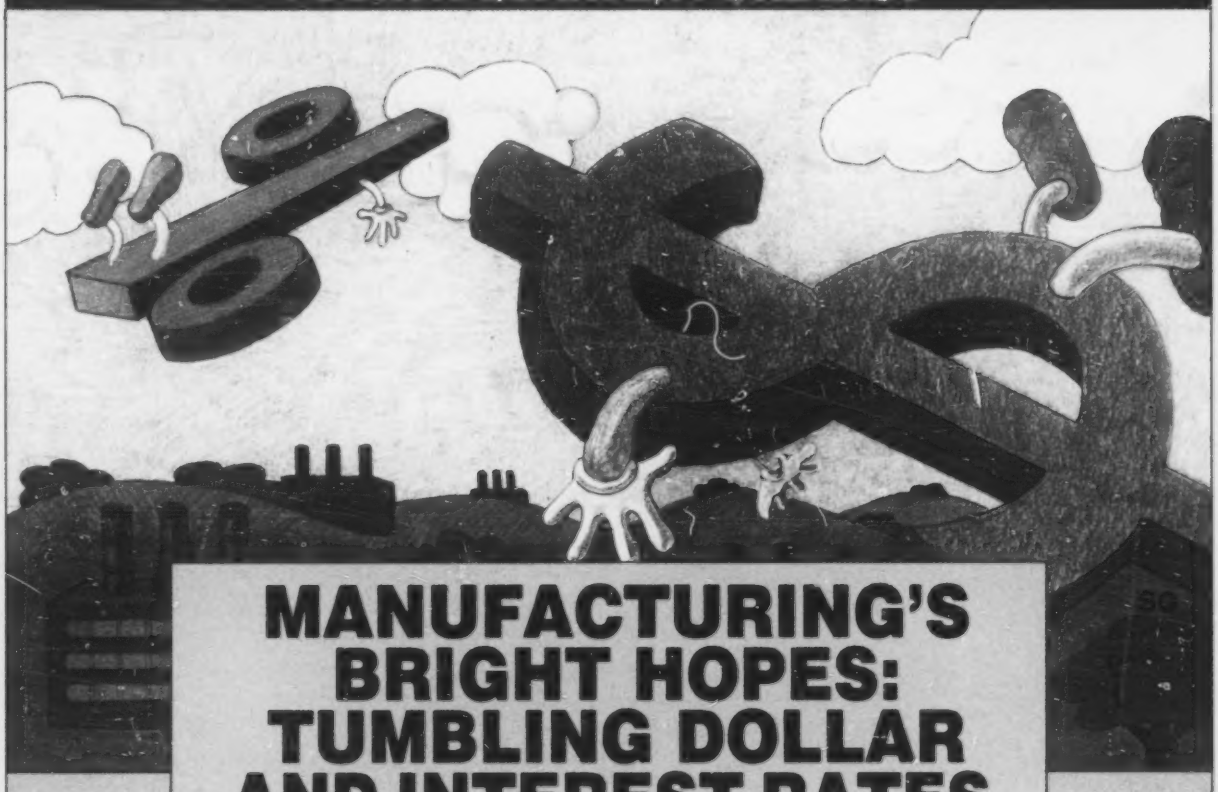
FOURTH QUARTER FORECAST



MANUFACTURING'S BRIGHT HOPES: TUMBLING DOLLAR AND INTEREST RATES

BY JOHN D. BAXTER

The dollar and interest rates will have to be pushed even lower if manufacturers are to get any real help before the year is over.

So far this year, some cherished economic theories have taken a beating. The theories aren't working, and that could mean more bad news for U.S. industry—especially the lagging manufacturing sector—before this year ends.

Case in point: The Federal Reserve Board, since late 1984, has driven interest rates down—and down sharply. Low interest rates are *supposed* to put new life into the economy. But... after almost two years of falling rates, the U.S. economy continues to plow along at a sluggish pace.

Another case in point: The dollar, under pressure from both the Fed and the Treasury Dept., has fallen steadily in exchange value for a year and a half. A falling dollar is *supposed* to boost U.S. exports and shrink imports. But... the U.S. trade balance continues to go deeper into the red.

Now, at the start of the final quarter of the year, a look at vital business data makes clear the need for even more intensified policy action to rescue the economy. In other words, there doesn't appear to be any upside business cycle force stirring on its own. This holds true for manufacturing industries which are now the weak link in the economy.

The Big Look

U.S. economic growth has now slowed to a point where it wouldn't take much of a push to topple it into a recession. (A recent survey shows that 31 states are already experiencing recessions.) The latest look shows that U.S. economic growth slowed to a sluggish annual rate of 0.6 pct in the second quarter. That was down sharply from a brief 3.8 pct growth rally in the first period.

The weakening of the economy has been going on for some time. In 1984, growth was 6.4 pct. In 1985, it was down to 2.7 pct. This year, it appears, growth will likely come to a bit more than 2 pct.

Growth has not only been slowing, but lately it has been lopsided as well. Consumers have played

the Atlas role and supported the economy on their broad shoulders. In the first two quarters, personal consumption expenditures rose by 3.6 pct and 6.5 pct, respectively. That, while business fixed investment *fell* by 15.1 pct and 2.3 pct.

The low interest rates engineered by the Fed have boosted sales of consumer products, but have not had much direct effect on companies in industrial goods lines. This lack of pass-through of the benefits of big consumer buying to prime industrial producers has been due to imports grabbing off a lion's share of the buying.

King Dollar

Thus, it is a lower dollar, and the policies that bring it about, that remain the shining hope for manufacturers of industrial products. When the dollar goes down far enough, then import competition will be stemmed.

But will help for manufacturing come quickly enough to end the year on the upside?

Based on latest data available as the year's final quarter gets underway, it does not appear that a sharp pickup in manufacturing fortunes will take place in the fourth quarter.

Capital investment, the crux of the matter, appears to be too weak – now, and in terms of near-at-hand prospects.

Business investment, even in these days of fine tuning of the economy by government policies, is still based largely on two questions that corporate senior executives must ask: 'Do I need new equipment? Can I afford it?'

A look at just a few investment-critical facts of life now facing manufacturing managers gives an idea of just what the answers of many are likely to be – at least, in this quarter.

In July of this year, the Fed's index of production (1977 = 100), for durable goods manufacturers was 126.3. That measure was one decimal point below the index of 126.4 of July of *two years ago*. In short, factory output of durable goods producers has been on a virtual plateau for two years.

Another key measure that underlies investment decisions by companies is seen in just how hard they are pressing their production capacity. On the basis of the recent trend in the Fed's aggregate measure of capacity utilization in manufacturing, there also has been no need to pile in new equipment. In July of this year, U.S. manufacturers were running their plants at 78.5 pct of capacity. That was the lowest usage rate since a 77.9 pct rate in November 1983.

Still, how about new orders flowing to manufacturers? The orders trend is important because it points to *future* changes in levels of output or plant usage. After all, managers must plan ahead in considering capital investments.

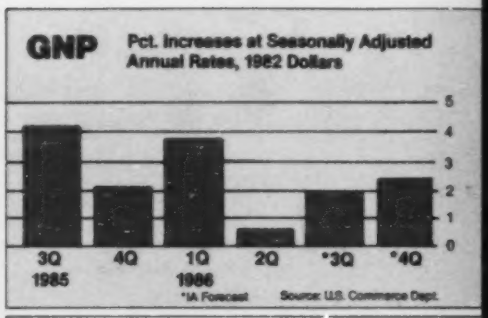
The best measure of new orders, as related to investment needs, is seen in orders for durable goods.

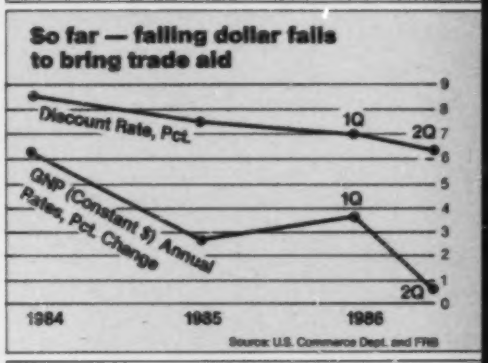
In July, these orders rose strongly from June due largely to a spurt in those always-volatile defense industry orders. Still, even including the defense orders, July orders were still 1.1 pct below the inflow back in January. Too, July orders, at $107.1 billion, were some $600 million below the orders volume received back in August of last year.

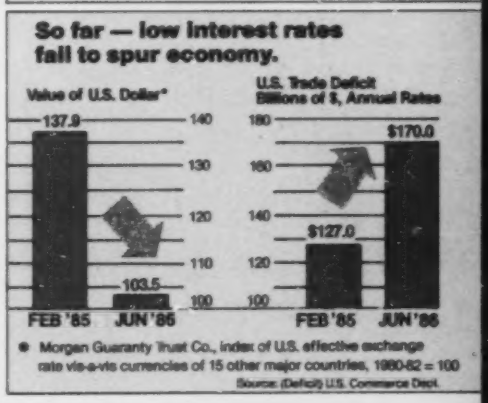
In sum then, the recent trend in factory output, plant capacity usage and incoming new orders points to no pressing need for manufacturers to invest in new plant and equipment.

Top-Heavy With Debt

Further, even if companies had need for new equipment, they might be hard-pressed to pay for it. Balance sheets of a great many manufacturers these days are top-heavy with debt. Moreover, corporate profits from operations in the second quarter this year were 1.7 pct *below* the third period last year, on a seasonally adjusted annual rate basis. And cash flow from operations – often called the prime feeder of plant spending – was up only an anemic 0.6 pct.







It would be expecting too much to think that all these signs would turn around in the final period of the year. Economic policy couldn't break things loose that suddenly. And the basic forces of the business cycle aren't likely to reverse themselves and make plants busy again overnight.

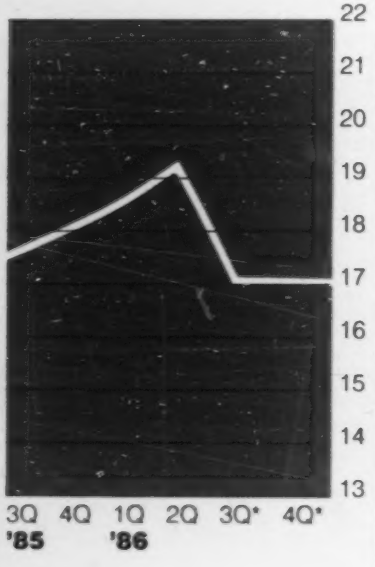
There still could be pleasant surprises. After all, many economic forecasts have missed the mark lately, even in the close-at-hand projections.

But, at this time, it does appear that manufacturers waiting for good news will probably have to wait until next year. □

STEEL

If there are other work stoppages, steel supply could really tighten.

Steel Shipments
In Millions of Tons



Source: AISI
*IA estimate

Going into the fourth quarter of 1986, the steel market picture was distorted by labor influences.

The strike at steel plants of USX Corp. diverted business to other mills. There could be more shifting of orders because of labor difficulties at other plants. As of early September, two plants of Armco, Inc., had yet to negotiate new contracts.

Benefiting from the labor situation were mills assured of continued operation. Weirton Steel Corp. and LTV Steel had both activated blast furnaces. Other large producers reported improved demand, particularly for sheet products.

It didn't appear that the improvement could be traced to anything other than the labor situation. Mill officials said the consumption of steel was down from the first half of the year.

While the market spurt seemed artificial and temporary, it could have one very real effect. Steel price increases for sheet and structurals were receiving widespread support. The increases proposed for plates were given a chance of sticking.

It's possible the steel industry will get its first significant price relief in five years. Relief is badly needed. Since the start of 1982, the industry has lost more than $7 billion. Wheeling-Pittsburgh Steel Corp. went broke in 1985, and LTV Corp. went bankrupt a few months ago.

The companies have attempted to restore profits by reducing costs. The industry's work force has been slashed more than 50 pct. The new contracts negotiated with United Steelworkers of America have cut labor costs—by $3.60 an hour in the case of LTV.

However, steel transaction prices have come down by 12 to 14 pct in the last five years.

It's doubtful that there will be an immediate, clear-cut price rise. Many of the orders in hand are at firm prices through the third quarter and in some cases through longer periods.

Nevertheless, there is a determined effort to implement increases as soon as possible. The success of this effort will depend to a considerable extent on the length of the USX work stoppage.

The answer to this could be: forever. More than a month after the Aug. 1 shutdown, the two sides weren't even talking and had no plans to talk. Pressure on the Steelworkers for a settlement was reduced when a number of states went along with the union's contention that the stoppage was a lockout, not a strike. On this basis, USX workers were declared eligible for unemployment compensation in Pennsylvania, Minnesota, Texas and Alabama. Payments in Pennsylvania range from $190 to nearly $230 a week.

On the other side, USX cushioned early impact of the strike by building stocks of finished steel in outside depots. There were said to be full month's supplies for some large accounts. There could also be delayed billing for material actually in the hands of users.

Also, USX can rely on revenues from its Marathon Oil division. The oil glut has hurt the division, but Marathon had second quarter sales of $2 billion and an operating profit of $179 million.

All in all, the outlook seemed to be for a long shutdown—possibly for the rest of 1986. Subtracting 1 million tons a month from normal supply should make for price firmness. If there are other work stoppages, supply could really tighten.

NONFERROUS METALS; PLASTICS

NONFERROUS METALS—It goes without saying that the fourth quarter will be better than the third for the nonferrous metals companies, if only for the absence of seasonal factors. About the best that could be said for the third quarter was that things didn't get any worse.

Metal prices still were on the defensive as they crossed the Labor Day boundary line. Copper values on the Comex were close to life-of-contract lows and they weren't projecting much more than a 6 pct rise through 1987.

Aluminum prices on the London Metal Exchange were edging up from seasonal lows (set earlier in August), but the LME nickel price was still bumping along the bottom.

Consumer markets continue to be the mainstay for the base metals. Capital spending rates thus far in 1986 haven't been sustaining and the new tax bill isn't expected to provide much of a spur for some time to come.

The aluminum industry booked 9.67 billion lbs of new business in the first half of 1986. First half shipments, according to the Aluminum Association, amounted to about 8.0 billion lbs, up 3.2 pct from the same 1985 period. Incoming business has been at a low level since last March and the industry has been living off that first quarter bulge.

Smelter strikes notwithstanding, the industry's inventory edged up in June, largely because of accumulations of ingot and scrap.

The drop in the value of the dollar didn't put much of a dent in aluminum mill product imports. Ingot imports, on the other hand, jumped nearly 75 pct. The lower dollar didn't do much for exports.

PLASTICS—Just what will happen next and when in the price of hydrocarbon feedstock is still on the minds of plastics producers and large customers. This situation is liable to continue, at least through the end of the year.

No matter, the plastics industry is well on the way to the best year in its history.

The big gainer this year is the thermoplastic polyester resins, materials which are becoming the structural darlings of the automotive industry.

Also showing strength is the nylon resins. Both materials, incidentally, are engineering plastics and are feared most by metals producers.

Through June, in sales and captive use, plastics as a whole are running 4.9 pct ahead of a record-breaking 1985. Thermoplastic polyesters are a healthy 17.5 pct ahead, while nylon resins are 10.5 pct ahead of 1985. The thermosets, which include the epoxies, are up by 5.1 pct, while the thermoplastics are enjoying a 4.8 pct gain.

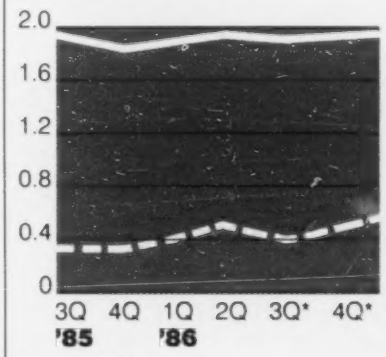
This year's third quarter is up about 1.8 pct over a good second quarter. The industry as a whole is expecting to see a seasonal slump of about 3.5 pct in the fourth quarter. Nevertheless, business is running close to 2 pct better than 1985 throughout all quarters.

On the customer side, the electronics industry remains strong. In automotive, gains are easier to come by, since plastics are starting almost from scratch as structural materials.

Another welcome sign for the industry—both for thermosets and thermoplastics—is the apparent revival in the home construction market.

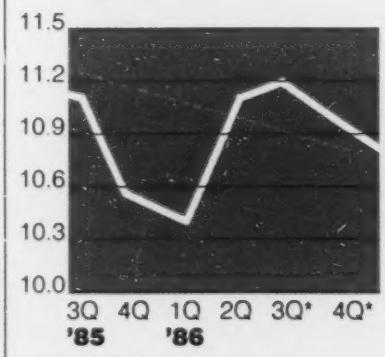
The fourth quarter will be better than the third for the nonferrous metals.

Nonferrous Metals Shipments
In Millions of Short Tons



Source: American Bureau of Metal Statistics, Aluminum Assn.
*IA estimate

Plastic Resins Sales & Captive Use
In Billions of Lbs

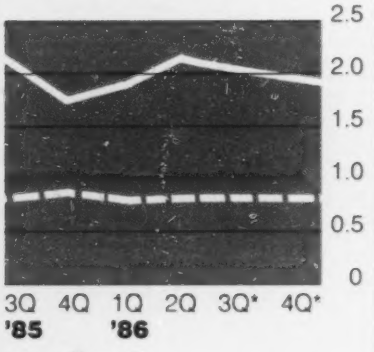


Source: SPI Committee on Resin Statistics as complied by Ernest & Whinney *IA estimate

AUTOMOTIVE; HEAVY EQUIPMENT

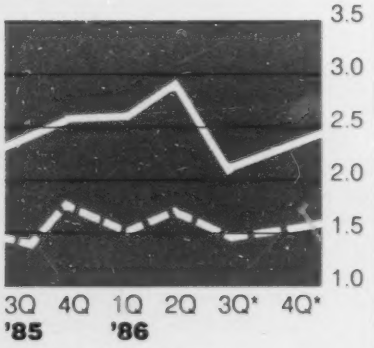
U.S. automakers plan to produce 2.0 million units in the fourth quarter.

Automotive Sales
In Millions of Units



Source: MVMA
*IA estimate

Heavy Equipment Shipments
In Billions of Dollars



Source: U.S. Dept. of Commerce
*IA estimate

AUTOMOTIVE – U.S. automakers expect to sell 1.9 million cars in the fourth quarter. That's a slight drop from the estimated 2.0 million sales in this year's third quarter but an increase from the 1.7 million units sold in the fourth quarter of 1985.

Foreign automakers predict sales of 800,000 cars in the fourth quarter. That's how many they sold in the same period last year.

In late August General Motors began offering 2.9-pct financing on three-year loans, a deal it termed "the greatest purchasing incentive in our company's history." Ford and Chrysler quickly followed suit. American Motors even offered zero-pct financing on two-year loans.

The effect of the incentives was "electrifying," said one GM sales vice president. "There were overflow crowds in GM showrooms and a record level of credit applications received from dealers by GM Acceptance Corp."

The incentives helped GM reduce its dealer stocks from 80 to 63 days' worth during August. Ford's dropped to 56 days and Chrysler's to 60 days; a stock of 60-65 days is considered optimum.

The incentives have cleared dealers' lots of most 1986 models. The big question now: Will the automakers have to use more incentives to sell their 1987 models?

U.S. automakers built 1.7 million cars in the third quarter. They plan to produce 2.0 million units in the fourth quarter to replenish the stocks depleted by the incentives.

The price discounts and low interest rates have raised consumer buying attitudes to the highest level in 40 years, reports the University of Michigan's Institute for Social Research.

HEAVY EQUIPMENT – Manufacturers of heavy equipment expect shipments to fall in the fourth quarter from last year's levels.

Farm equipment makers predict $2.4 billion of shipments in the fourth quarter compared with $2.6 billion in the same period last year. Construction equipment makers expect shipments to drop from $1.7 billion to $1.6 billion in the same period.

Midway through 1986, equipment customers became certain that the U.S. Congress will end the 10 pct tax credit for buying heavy equipment. Congress will allow no such credits for purchases made after Dec. 31, 1985. Sales of heavy equipment slowed as customers realized the tax credit was gone.

Also, farm equipment makers in 1984 and 1985 offered higher discounts in the first half than in the second half. Discounts probably will drop off again in the second half of this year.

"I expect sales of farm equipment to drop by 5-10 pct from the second half of 1985 to the second half of 1986," said the economist of one leading farm and construction equipment firm.

Construction equipment inventories are about where they should be, said one executive. Federal spending for roads is decreasing, but state and local revenues are taking up the slack. That will mean continued orders for wheelers and crawlers and some excavators.

"Farm equipment inventories are twice as high as construction equipment ones," said the heavy equipment executive. Farm equipment inventories are swollen to 3-6 months above optimum supplies, he said.

MACHINE TOOLS; FLUID POWER

MACHINE TOOLS – The U.S. machine tool industry continues to be mired, the result of management indecision, low plant utilization rates, and pending new tax laws that appear to be full of disincentives for capital spending.

In the absence of any positive news for the manufacturing business that would give even a glimmer of hope for a significant order upturn, *Iron Age* predicts the fourth quarter for U.S.-based machine tool builders will be about the same as the second quarter, with the third quarter dipping about 7 pct.

The outlook for the machine tool industry as a whole may be a great deal stronger than the figures indicate. If the U.S. machine tool market is or has collapsed, why is it still considered to be the number one machine tool market in the world? Many overseas machine tool builder want a piece of the action and are doing everything possible to get market share. Several have already set up assembly and manufacturing plants within the U.S.

Import restrictions on machine tools, if imposed by the U.S. government, would not necessarily change the number of machine tool orders placed, though U.S. builders might benefit somewhat in the long term.

The lower value of the dollar theoretically gives U.S. builders an edge on exporting, but most neither have the desire nor the resources to mount effective campaigns overseas. Those builders that have been exporting and are established overseas should do well.

Meanwhile, the backlog of orders among U.S. builders is shrinking as shipments outstrip orders.

FLUID POWER – Shipments of fluid power products during the first half of 1986 have been blowing hot and cold month after month.

Shipments of hydraulic and pneumatic fluid power products rose 19 pct in January over December. In February, they dropped 2 pct below January, only to rise in March to 5 pct over February.

The percentage increases and decreases masked the steady but slightly upward improvement in shipments during the first half of the year. Shipments in the first quarter rose 3 pct over the fourth quarter of 1985 and the second quarter of 1986 was up 4 pct over the previous quarter.

The outlook for the rest of the year is cautious and depends largely on the general economy as it impacts on aircraft, machine tools, farm equipment, and off-highway construction equipment.

The fluid power industry appears to be in a flat calm about to be buffeted by a rising tide of direct and indirect imports.

A highly cyclical seasonal business, the fluid power industry has managed to turn in some pretty solid sales, adjusted for inflation, in a flat year.

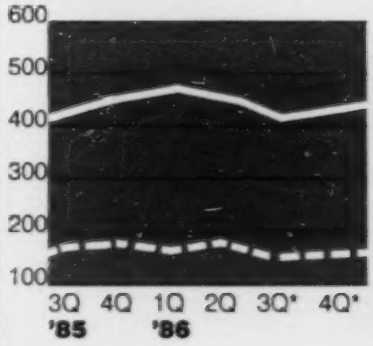
It has done well considering that the U.S. machine tool builders, in general, are doing poorly. The farm equipment builders are working off excessive inventories, so their production is low, and the off-highway construction industry is going nowhere.

The aircraft industry is doing well in some areas, poorly in others.

For the fourth quarter, *Iron Age* predicts more of the same. It will be a good year, in retrospect, but lackluster on a day-by-day basis.

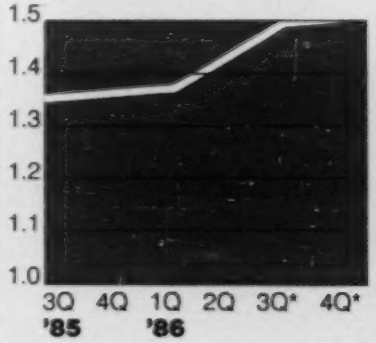
The outlook for the machine tool industry may be stronger than the figures indicate.

Machine Tools
Net New Orders
In Millions of Dollars



Source: NMTBA
*IA estimate

Fluid Power, Shipments
In Billions of Dollars

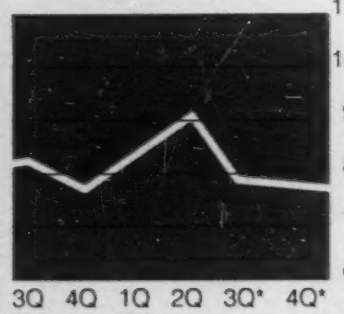


Source: U.S. Dept. of Commerce and NFPA
*IA estimate

COATINGS; MATERIAL HANDLING

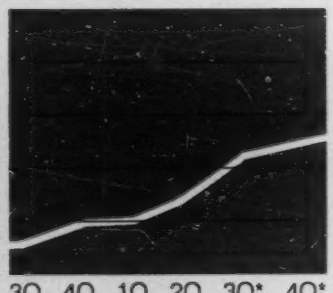
Most of the coaters' major markets are ordering fewer gallons this year.

Industrial Coatings Shipments
In Millions of Gallons



Source: U.S. Dept. of Commerce
*IA estimate

Material Handling Shipments
In Billions of Dollars



Source: Material Handling Institute
*IA estimate

COATINGS—Industrial-coating companies expect to ship about 77 million gallons of product in the fourth quarter this year. That's the same number they shipped in the fourth quarter last year.

"The pickup in business we had hoped for in the second half of 1986 never materialized," explained the vice president of a major Midwestern coatings firm. "Shipments in the fourth quarter of 1985 were so low, however, that I hope we can at least match them."

Most of the coaters' major markets are ordering fewer gallons this year. The business-machine market has accounted for perhaps the biggest drop in coating shipments: down 35 pct from 1985.

"Business-machine sales reached their peak in 1984," commented one executive. "I don't think we'll see those levels of sales again for a while."

Coil coatings are holding steady despite a big dropoff in demand for automotive Zincrometal. Coil coaters are focusing now on other markets: automotive functional parts and metal office furniture such as desks and filing cabinets. Growth in the latter market has been greatly aided by new durable adhesives that eliminate the need for welding.

One healthy market for all coatings is the metal extrusions used for doors, windows, and other parts of buildings. "The metal-extrusion market for coatings just keeps on rolling," commented one executive.

The trend to high-solid coatings continues. High-solid coatings have 80 pct solids by weight, compared with 50-60 pct for conventional coatings. "Almost everyone's choosing high-solid coatings now," said one coatings manager.

MATERIAL HANDLING—Fourth quarter forecasts can be drab, even predictions of a fall order pickup can be overhung with the summer slump.

But the materials handling industry is keeping its head—and hopes—up for the fourth quarter and into 1987.

One Midwestern AS/R systems manufacturer said the auto industry has been "greasing his wheels," through the three quarters of 1986 and he sees no downshifting of gears into 1987.

Several other AS/R systems manufacturers reported backlog strength, and are confident their traditionally strong markets—electronics, defense, food and beverage—will hold up into the new year. (And, as they continue to point out, their optimism is fed by their "broad market base.")

In figure estimates, makers of sophisticated, automated systems see fourth quarter bookings up 10 to 12 pct over the third quarter; shipments, perhaps 15 to 17 pct higher in fourth quarter 1986 vs. the third quarter.

Although most lift truck makers continue to show black-and-blue marks from imports and have gone about as far as they can in discounting prices, two Midwestern companies that make industrial lift trucks reported strong sales of their customized walkie lift vehicles this summer, with the trend continuing throughout the winter.

Reacting to the tax overhaul package, one MH executive complained, "It's sharpening the wrong side of the blade."

New business taxes will contract corporate capital expenditures, "eventually undercutting productivity, which the U.S. should avoid," he added.

COMPUTERS; INSTRUMENTS & CONTROLS

COMPUTERS – For some 20 months now, the computer industry has been in a slump. Occasionally, brief sales flurries have lead to forecasts of the slowdown's end. But the slump is still with us.

If computer equipment orders continue at the same rate as they have through the first two quarters, 1986 sales figures will top 1985 totals by little more than 2 pct (a long drop from the 25 pct growth of 1984). However, this figure could be low if a recent sales flurry continues.

Led by the solid performance of Digital Equipment Corp. (17 pct second quarter growth), a number of selected computer firms, countering the trend, have been doing well in recent months.

The current slump in computer sales results from a variety of factors. In the past, sales were unaffected by changes in capital spending. No longer. Today, sluggish industrial production is holding down capital spending and therefore computer purchases.

Also, companies are discovering computers are not a panacea. Many companies that have turned to computerization are finding that hoped for major productivity increases are not materializing. They have become gun-shy.

Also, firms that already have computers are hesitant to take next step – linking those computers together into networks and integrated systems. Many firms with a hodgepodge of computer equipment are pausing to re-evaluate their operations with an eye to making better use of the computers they already have rather than buying new ones.

For the most part, the most successful computer companies in recent months have been those best able to address integration issues.

INSTRUMENTS & CONTROLS – The dollar is declining in value relative to other major currencies. This is good new news for U.S. instruments and controls manufacturers, for more than one-quarter of their production goes to foreign countries.

The bad news is that sluggish U.S. industrial production and capital spending are making sales harder to come by in this country. And with overseas instruments and controls manufacturers becoming increasingly competitive both here and abroad, industry growth for the third and fourth quarter is approaching a standstill. A 1 pct sales increase for each quarter is expected. This sluggishness could spill into the first half of 1987.

Sales at home have slipped because of a fall-off in manufacturing capacity utilization, bringing on a decline in industrial construction. New construction tends to generate instrument sales.

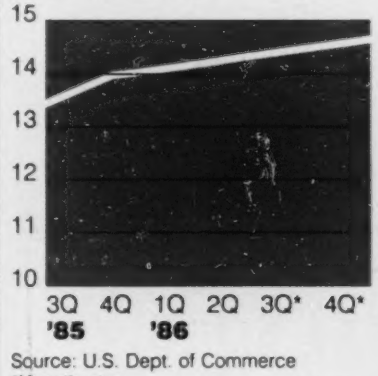
In addition, traditional heavy users of measuring and controlling instruments (one of three major instrument classifications – the others being scientific instruments and instruments to measure electricity) have fallen on hard times. The depressed steel and oil and gas industries, for example, are buying few instruments.

On the plus side, R&D programs, especially those run by defense-related industries, remain strong. Research operations are heavy users of instruments.

The rising emphasis on quality is bringing about increased use of mechanical testing equipment, while increased production of aircraft, especially for the commercial sector, means more instrument sales.

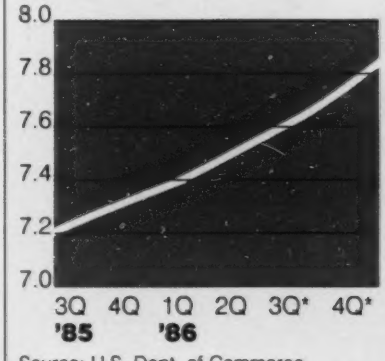
Sluggish industrial production is holding down computer purchases.

Computers Shipments
In Billions of Dollars



Source: U.S. Dept. of Commerce
*IA estimate

Instruments & Controls Shipments
In Billions of Dollars



Source: U.S. Dept. of Commerce
*IA estimate

CASTINGS; FORGINGS

CASTINGS—At best, business conditions in ferrous castings can best be described as moving sideways. Some foundries are reporting increased sales; others, just the reverse. Much of this can be traced back to Detroit where some car models are selling, others not.

Iron foundries continue to go out of business—all due, industry members say, to government policies on foreign sourcing and imports. These problems are having a crippling effect on the U.S. industry. Foundrymen are not optimistic that any policy changes are in the offing in Washington.

The U.S. Dept. of Commerce sees a 27 pct drop in ferrous casting shipments from the second quarter of 1985 to the same period this year. *Iron Age* foresees a 15 pct decrease in the third quarter from the same period of 1985, but only a 5 pct drop in shipments from the second to third quarters of 1986.

Some foundries are not so gloomy as these figures would seem to indicate, especially at the beginning of this year. The present government statistics show that this year's January-to-May period is 25 pct under the same period in 1985. It would appear that business has not really been that bad.

As a result, Commerce officials are working on a more reliable set of figures. Revisions are imminent.

During the second quarter, shipments seem to have hit high levels in April. This was true for gray, ductile and malleable iron castings. The same was the case for steel castings. Over the longer haul, foundrymen see ductile iron as the growth material. Gray iron castings, they add, will continue to shrink in volume.

FORGINGS—As predicted, the forging industry is closing out what could charitably be called a flat year. Last year, industry forecasters said 1986 sales figures would be no better than 1985 totals. That appears to be what is happening. Going into September, year-to-date 1985 and 1986 order totals were dead even.

And 1987 likely will be no better—and could be a good deal worse. If capital spending continues its nosedive, if auto sales continue to tail off, if military spending is cut, and if forgings continue to pour into this country at their current record pace, then U.S. forging companies are in for a tough 1987.

And there is more bad news. The continuing depression of industries that once were heavy forging users—notably the oil patch, agricultural and off-highway equipment, and industrial machinery industries—is expected to carry into 1987.

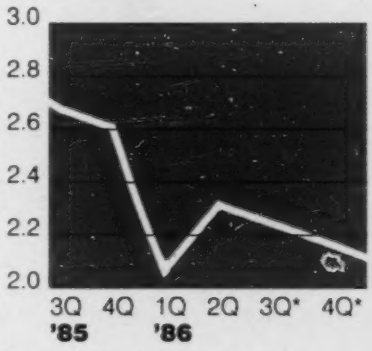
The one bright spot is that commercial aircraft production should remain strong through next year. Since an estimated 40 pct of the domestic forging production goes to aerospace companies, a strong commercial aerospace sector can shore up a major portion of a faltering industry.

Another plus is the declining strength of the dollar. With more than 40 pct of ferrous forged products coming from overseas, a weakened dollar makes it more costly to import. However, offshore forging producers are fighting to maintain their share of the U.S. market.

The fourth quarter should see more orders and shipments than the third, if only because production and orders traditionally rebound after summer slowdowns.

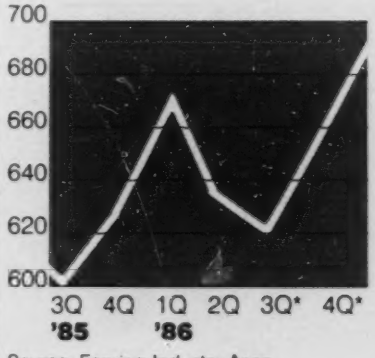
Over the longer haul, foundrymen see ductile iron as the growth material.

Ferrous Castings Shipments
In Millions of Tons



Source: U.S. Dept. of Commerce
*IA estimate

Impression Die Forgings Shipments
In Millions of Dollars

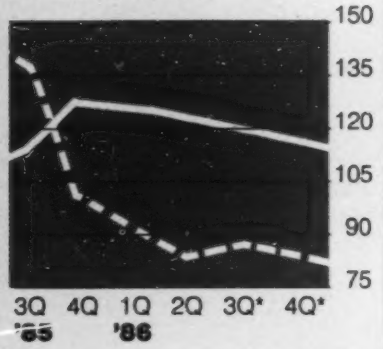


Source: Forging Industry Assn.
*IA estimate

HEAT TREATMENT

No improvements are seen by the heat treating industry.

Heat Treatment
In Millions of Dollars



Source: Industrial Heating Equipment Assn.; Metal Treating Institute *IA estimate

HEAT TREATMENT – The activity in heat treating, both from the standpoint of commercial heat treating and heat processing equipment orders, is not good.

In addition, industry members foresee little improvement in the near term unless favorable tax reform is enacted. Customers continue to shy away from inventory build-ups, one source says.

Out-sourcing continues to be a major problem, especially in the Midwest. Some manufacturers are going overseas for heat-treated components.

Also, some commercial heat treaters are reporting cases where customers are switching from metals to plastics, especially in smaller parts.

Business in the oil country industry gets worse and worse, with no let-up in sight.

Domestic orders for industrial heating equipment are not very encouraging, according to the Industrial Heating Equipment Association (IHEA). Orders for equipment reached $73 million in the second quarter, a decrease of 13 pct from orders reported for the same period in 1985.

Domestic industrial furnace and oven sales for the second quarter of 1986 totaled $31 million, down 41 pct from 1985 when orders totaled $51 million.

On the commercial heat treating side, the Metal Treating Institute reports a $1^3/_4$ pct drop in dollar sales in the second quarter from the same period in 1985.

Iron Age estimates a 4.3 pct increase in sales for this year's third quarter vs the third quarter, 1985, but a 2 pct drop in sales from the second to third quarter of this year.

No improvements are seen by either sector for the fourth quarter.

Coil Joining Update for High-Strength Steel:

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WELDING

WELDING – Statistics from the National Welding Supply Association (NWSA) indicate that the second quarter of 1986 was the "best ever."

Most major manufacturers of welding equipment and electrodes, however, disagree.

A spokesman for one major welding manufacturer said that the second quarter for his company fell below expectations, but that there was a slight rebound in the third quarter.

Clouding predictions is present labor unrest among several major users of welding. The effect is a reluctance on other companies to take advantage of the low interest rates and go ahead and expand.

The auto industry continues to slip, but defense work, especially in Naval shipbuilding, remains very strong.

Also strong are the many new but small fabricators and manufacturers that are finding niches in weld fabrication.

The figures from the NWSA indicate a slight 1.2 pct increase in welding distributor sales from the second quarter of 1985 to the second quarter of 1986.

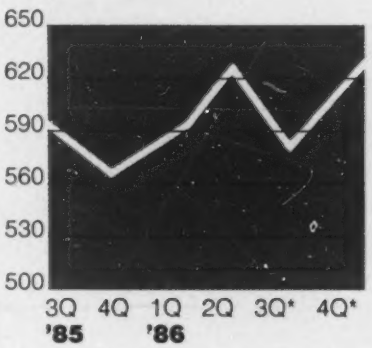
An even slighter 0.2 pct decrease is *Iron Age's* estimate of sales from the third quarter of 1985 to the same period this year, and a 5 pct increase in distributor sales from this year's second to third quarter.

The NWSA index is compiled from monthly sales of a statistically selected cross section of the association's membership. Incidentally, the figure of 216.9, recorded in April of this year, was the highest ever since the NWSA started keeping track of sales in 1977.

On the other hand, domestic welding manufacturers see current business as "flat."

Domestic welding manufacturers see current business as 'flat.'

Welding Shipments



Index 100 = $200 million in distributor sales
Source: National Welding Supply Assn.
*IA estimate

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Steel summary: Sheet prices expected to rise this month

Price increases for steel sheet seem to be sticking.

Mill executives said they were applying the increases to fourth quarter orders not covered by long term contracts. According to one estimate, about half the sheet tonnage will be carrying higher prices after Oct. 1.

Making for price firmness is a tightening of supply as a result of labor problems and other factors. The work stoppage at steel plants of USX Corp. provided extra business for other mills.

In addition, there was uncertainty about continued supply from a number of steel mills. The Rouge Steel division of Ford Motor Co. was operating on labor contract extensions in September. Armco, Inc.'s Middletown, Ohio, plant, was hit with a brief walkout in early-September, but the workers were expected to return pending ratification of a tentative agreement. The bankruptcy of LTV Corp. could result in labor hassles.

The effect of all this has been to extend lead times to about eight weeks on hot rolled sheet and 10 weeks on cold rolled sheet. The supply of galvanized sheet was fairly tight to start with and problems were reportedly being compounded by slow start-ups of the five new electrogalvanizing lines.

Another element in the supply picture was the voluntary restraint program for steel imports. The import tonnage rose in July (see following story), but officials said Japanese and European mills were abiding by their limits.

Steel users in the Midwest were said to be having difficulty buying all the foreign steel they wanted.

With regard to demand, a sharp increase in auto sales in August indicated orders for sheet would continue at brisk levels. Domestic car sales jumped from an annual rate of 7.4 million in July to a rate of 9.4 million in August.

The auto companies and other large users buy steel on contracts that provide firm prices for 6 to 12 months. It will be some time before higher prices can be applied to this business.

Service centers, welded pipe mills, and miscellaneous end users buy on a quarterly basis and can be hit with higher prices in the fourth quarter.

The leverage of pricing can be enormous. Since the start of 1982, steel prices have been cut 12 to 14 pct. This has been the big factor in the industry's $7.5-billion-loss over the last four years.

Mill officials don't expect a dramatic profit swing now, but they are hoping for a little relief.

Steel imports topped 2 million tons in July, AISI says

Steel imports have climbed sharply as U.S. raw steel production continues to slip, according to the American Iron and Steel Institute (AISI).

The trade group's latest figures, for July, showed steel imports climbing to the highest monthly level this year—to 2.06 million net tons. That, AISI said, compared with 1.73 million tons in June and 1.58 million tons in July 1985.

AISI blamed the July increase on increased shipments from countries not covered by the voluntary restraint agreements (VRAs) put into place by President Reagan.

AISI reported that imports from Canada rose from 249,000 tons in June to 307,000 tons in July, pushing the seven-month total from that country to 1.82 million tons, compared with 1.77 million tons in the same 1985 period.

It also noted that imports from Taiwan rose from 49,000 tons in June to 65,000 tons in July, making a seven-month total of 295,000 tons this year, compared with 116,000 tons in the same 1985 period.

July imports were 27.1 pct of the estimated supply in the U.S. market, based on AISI's preliminary estimate of domestic mill shipments of 5.6 million tons for the month. This compared with 22.6 pct in June and 21.9 pct in July 1985.

The trade association also noted that imports totaled 12.78 million tons in the first seven months of this year, or 23.2 pct (as a preliminary estimate) of the market supply. That compared, it said, with 14.54 million tons—or 25.6 pct—in the first seven months of 1985.

Imports of semi-finished steel were 1.27 million tons in the first seven months of this year, compared to the Reagan Administration's goal of holding them to 1.7 million tons for the entire year.

Scrap price corrections

Several prices which were reported effective August 25 and appeared in the September 19 issue of *Iron Age* were incorrect. The prices that should have been reported are as follows:

Pittsburgh:	
Shoveling turnings	$43-44
Cast iron borings	$42-43
Chicago	
No. 1 dealer bundles	$89-90
No. 1 busheling	$85-86
No. 1 RR hvy. melting	$79-80
Buffalo	
No. 1 hvy. melting	$53-54
No. 2 hvy. melting	$43-44
No. 1 busheling	$71-72
No. 1 dealer bundles	$71-72
No. 2 dealer bundles	$31-32
Cast iron borings	$25-26
Low phos. plate	$78-79
Structural and plate, 2 ft. and under	$78-79
Ingot Makers Scrap	
Radiators	34¢
Dealers' Scrap	
Aluminum	
Borings and turnings	19-20¢

Scrap price clarification

At **St. Louis**, effective Sept. 8, *Iron Age* stopped reporting prices for rails, 18 in. and under. Instead, it will report prices for rails, 5 ft. and under, in that market.

PRICE & PRODUCTION DATA

(Effective September 8,1986)

Steel production by districts, thousands of tons (000 omitted)

	Last Week	Two Weeks Ago	Month Ago	Year Ago
Northeast Coast	116	134	130	182
Pittsburgh	158	168	176	149
Youngstown	112	103	97	91
Lake Erie	100	103	84	113
Detroit	143	135	122	147
Chicago	315	322	298	491
Midwest	139	141	134	162
Southern	136	138	135	182
Western	42	40	61	74
U.S. Production	1,261	1,284	1,237	1,591

Source: American Iron & Steel Institute

Lake Superior Ore Prices

51.50% Fe Natural delivered lower Lake ports unless otherwise stated. Rail transportation, handling and unloading may be charged to buyer. Coarse ore 80¢ premium.

Pellets (per iron unit natural) ..... gross-ton 58.0*
Pellets (per iron unit natural) ..... gross-ton 59.4**
Pellets (per iron unit natural) ..... gross-ton 72.5-86.9***
Mesabi, regular-unscreened ..... gross-ton $32.53
Mesabi, non-bessemer ..... gross-ton $30.03-31.53

*58.0¢–Mineral Services, 8/13/85. **59.4¢–Inland Steel Mining, 1/1/85 and Pickands Mather, 8/1/85, delivered hold of vessel, upper Lake ports. ***72.5¢–U.S.Steel, 8/16/85. 86.9¢–Oglebay Norton 3/25/82; Hanna Mining and Cleveland-Cliffs 2/26/82.

STEEL PRODUCTION, COMPOSITE PRICES

(Effective September 8,1986)

U.S. Steel Production	Last Week	Two Weeks Ago	To Date 1986	To Date 1985
Net tons, in thousands	1,261	1,298	57,988	60,295
Capability Utilization Rate	52.0	53.5	66.1	66.0

Composite Prices	This Week	Week Ago	Month Ago	Year Ago
Finished Steel Base* (¢/lb.—eff. 8/31/86)	24.951	24.850	24.850	27.582
Pig Iron** (Net ton = 2000 lbs.)	$213.00	$213.00	$213.00	$213.00
Scrap No. 1 hvy.*** (Gross ton = 2240 lbs.)	$ 74.50	$ 75.17	$ 74.83	$ 72.83
No. 2 bundles	$ 52.17	$ 53.17	$ 53.83	$ 53.17

Scrap Comparison (Gross Ton)

No. 1 steel, Pittsburgh	$ 76.50	$ 76.50	$ 75.50	$ 75.50
No. 1 steel, Philadelphia	73.50	73.50	73.50	70.50
No. 1 steel, Chicago	73.50	75.50	75.50	72.50
No. 1 bundles, Detroit	72.50	72.50	69.50	69.50
Low Phos., Youngstown	74.50	74.50	74.50	70.50
No. 1 mach'y cast., Pgh	74.50	74.50	74.50	71.50
No. 1 mach'y cast., Phila	93.50	93.50	93.50	92.50
No. 1 mach'y cast., Chi	103.50	105.50	105.50	99.50

*Finished Steel Composite: Weighted index of steel bars, shapes, plates, wire, rails, black pipe, hot and cold rolled sheets and strips.
**Pig Iron Composite: Based on average prices for basic and foundry pig iron at representative producing points within the U.S.
***Steel Scrap Composite: Average of No. 1 hvy. melting steel scrap and No. 2 bundles delivered to consumers at Pittsburgh, Philadelphia and Chicago.

NONFERROUS PRICES

(Effective September 8,1986) Prices obtained in trade based on representative tonnages per gross ton delivered to consumer unless otherwise stated.

Primary Metal Prices

(cents per lb.)	current price	last price	date of change
Aluminum (LME)	52.07	51.27	9/ 8/86
Copper (C)	64.00-65.00	60.00-62.00	9/ 5/86
Lead	22.50-23.00	22.25-22.50	8/28/86
Magnesium Ingot	153.00	148.00	12/ 9/85
Nickel (LME)	166.84	170.54	9/ 8/86
Zinc	44.00	41.00-44.00	7/30/86

ALUMINUM: Avg. for last week & previous week. COPPER (C) = cathode. LEAD: common grade. MAGNESIUM: 99.8% pig, delivered. NICKEL: Avg. for last week & previous week. ZINC: high grade.

Antimony, American Laredo, Texas	$2.00
Beryllium-aluminum 5% Be, per lb. contained Be	$248.00
Beryllium-copper, per lb. cont. Be	$144.00
Beryllium 97% powder 200	$197.00
Cadmium, ton lots	$1.00
Calcium, ton lots, crown	$3.92
Chromium, 99.5% electro	$4.62
Cobalt, 99%, cathode	$11.70
Gold per troy oz.	$413.25
Indium, dollars per troy oz.	$2.65
Iridium, dollars per troy oz.	$415.00
Magnesium sticks, 10,000 lbs.	$2.02
Mercury, per 76-lb., f.o.b. N.Y.	$195.00-210.00
Molybdenum, lb. tech. moly oxides, 20 lb. MO can	$3.25
Palladium, per troy oz.	$141.00
Platinum, per troy oz.	$610.00
Rhodium, per troy oz.	$1,235.00
Silver ingots, per troy oz.	$5.78
Titanium sponge, melt grade	$3.40-3.55
Tungsten powder, hyd red.	$9.50-9.85
Vanadium	$6.00
Zirconium sponge	$12.00-17.00

(Per lb. unless otherwise noted)

Straits Tin Price

(U.S. cents per lb. EX-SMELTER, based on daily market in Kuala Lumpur in Malaysian dollars per kilo.)

September 1—N.A. September 4—N.A.
September 2—N.A. September 5—N.A.
September 3—N.A.

Scrap Prices
Brass Mill Scrap

(Cents per lb; over 20,000 lbs. add 1¢ per lb)

	Solids	Turnings
Copper	56	51
Yellow brass	50	49½
Red brass	51	47
Comm. bronze	52½	47½
Mang. bronze	41½	40½
Free cutting rod ends	49	48

Custom Smelters Scrap

(Cents per lb., carload lots, del. refinery)

No. 1 copper wire	53
No. 2 copper wire	44
Light copper	36

Ingot Makers Scrap

(Cents per lb., carload lots, del. refinery)

No. 1 copper wire	49
No. 2 copper wire	40
Light copper	32
No. 1 composition	45
No. 1 comp. turnings	44
Hvy. yellow brass solids	30
Hvy. yellow brass turnings	25
Radiators	34

Aluminum

New mixed clips	35	— 36
Old sheet	33	— 34
Old cast	33	— 34
Clean dry borings	34	— 35

Dealers' Scrap

(Dealers' buying price f.o.b. New York in cents per pound)

Aluminum

Segregated clippings	28	— 29
Mixed I.C. clips	26	— 27
Old sheets and cast	23	— 24
Borings and turnings	19	— 20
Duraluminum clippings	24	— 25

Copper and Brass

No. 1 copper wire	45	— 47
No. 2 copper wire	36	— 37
Light copper	31	— 33
Radiators	26	— 27
No. 1 composition	36	— 37
No. 1 composition turnings	34	— 35
Cocks and faucets	27	— 28
Clean heavy yellow brass	25	— 26
Brass Pipe	27	— 28
New soft brass clippings	37	— 39

Lead

Heavy soft lead	5	— 7
Whole batteries	1	— 3
Type metal	15	— 17
Electrotype	13	— 14

Nickel

Nickel solids	105	—115
Nickel rod ends	105	—115
Nickel sheets, clips	105	—115
Nickel turnings	25	— 35

Zinc

New zinc clippings	16	— 17
Old diecast zinc	12	— 13

EFFECTIVE SEPTEMBER 8, 1986

(Effective September 8, 1986) Prices obtained in trade based on representative tonnages per gross ton delivered to consumer unless otherwise stated. Prices are the opinions of *Iron Age* editors and correspondents, based on contacts with dealers, brokers, generators and users in the industry on the effective date listed above.

Ferrous Scrap Prices

Pittsburgh

No. 1 hvy. melting	$ 76.00 to	$ 77.00
No. 2 hvy. melting	66.00 to	67.00
No. 1 dealer bundles	93.00 to	94.00
No. 1 factory bundles (auto)	94.00 to	95.00
No. 2 bundles	46.00 to	47.00
No. 1 busheling	87.00 to	88.00
Machine shop turnings	8.00 to	9.00
Shoveling turnings	43.00 to	44.00
Cast iron borings	42.00 to	43.00
Low phos. punchings plate	104.00 to	105.00
Heavy turnings	66.00 to	67.00
No. 1 RR hvy. melting	86.00 to	87.00
Rails, 2 ft. and under	96.00 to	97.00
Scrap rails, random lgth	83.00 to	84.00
RR specialties	96.00 to	97.00
No. 1 machinery cast	74.00 to	75.00
Cupola cast	67.00 to	68.00
Heavy breakable cast	30.00 to	31.00
Stainless		
18-8 bundles and solids	495.00 to	505.00
18-8 turnings	395.00 to	405.00

Chicago

No. 1 hvy. melting	$ 73.00 to	$ 74.00
No. 2 hvy. melting	68.00 to	69.00
No. 1 dealer bundles	89.00 to	90.00
No. 1 factory bundles (auto)	91.00 to	92.00
No. 2 dealer bundles	57.00 to	58.00
No. 1 busheling	83.00 to	84.00
Shredder scrap	81.00 to	82.00
Machine shop turnings	26.00 to	27.00
Mixed borings and turnings	20.00 to	21.00
Shoveling turnings	27.00 to	28.00
Cast iron borings	40.00 to	41.00
Low phos. forge crop	94.00 to	95.00
Low phos. punchings plate 1/4 in. and heavier	111.00 to	112.00
Low phos. 2 ft. and under	106.00 to	107.00
No. 1 RR hvy. melting	76.00 to	77.00
Scrap rails random lgth	79.00 to	80.00
Reroller rails	100.00 to	101.00
Rails, 2 ft. and under	96.00 to	97.00
RR couplers and knuckles	81.00 to	82.00
RR car axles	106.00 to	107.00
No. 1 machinery cast	103.00 to	104.00
Cupola cast	90.00 to	91.00
Stove plate	99.00 to	100.00
Steel car wheels	87.00 to	88.00
Stainless		
18-8 bundles and solids	465.00 to	475.00
18-8 turnings	370.00 to	380.00
430 bundles and solids	125.00 to	135.00
430 turnings	85.00 to	95.00

Philadelphia

No. 1 hvy. melting	$ 72.00 to	$ 75.00
No. 2 hvy. melting	64.00 to	67.00
No. 1 dealer bundles	84.00 to	87.00
No. 2 dealer bundles	51.00 to	54.00
No. 1 busheling	84.00 to	87.00
Shredder scrap	84.00 to	87.00
Machine shop turnings	24.00 to	27.00
Mixed borings and turnings	24.00 to	27.00
Shoveling turnings	38.00 to	41.00
Low phos. 5 ft. and under	79.00 to	82.00
Low phos. 2 ft. punchings	93.00 to	96.00
Electric furnace bundles	90.00 to	93.00
RR specialties	79.00 to	82.00
Rails, 2 ft. and under	96.00 to	99.00
Cupola cast	85.00 to	88.00
Heavy breakable cast	53.00 to	56.00
No. 1 machinery cast	92.00 to	95.00

Detroit

Brokers buying prices per gross ton on cars:

No. 1 hvy. melting	$ 54.00 to	$ 55.00
No. 2 hvy. melting	53.00 to	54.00
No. 1 dealer bundles	72.00 to	73.00
No. 2 bundles	35.00 to	36.00
No. 1 busheling	70.00 to	71.00
Drop forge flashings	44.00 to	45.00
Machine shop turnings	26.00 to	27.00
Mixed borings and turnings	7.00 to	8.00
Shoveling turnings	26.00 to	27.00
Cast iron borings	22.00 to	23.00
Heavy breakable cast	32.00 to	33.00
Mixed cupola cast	47.00 to	48.00
Automobile cast	71.00 to	72.00
Stainless		
18-8 bundles and solids	450.00 to	460.00
18-8 turnings	330.00 to	340.00
430 bundles and solids	115.00 to	125.00

Youngstown

Brokers buying prices per gross ton on cars:

No. 1 hvy. melting	$ 57.00 to	$ 58.00
No. 2 hvy. melting	55.00 to	56.00
No. 1 dealer bundles	75.00 to	76.00
No. 2 dealer bundles	33.00 to	34.00
Machine shop turnings	20.00 to	21.00
Shoveling turnings	20.00 to	21.00
Low phos. plate	74.00 to	75.00
Electric furnace bundles	63.00 to	64.00
Galvanized bundles	60.00 to	61.00

Cleveland

Brokers buying prices per gross ton on cars:

No. 1 hvy. melting	$ 55.00 to	$ 56.00
No. 2 hvy. melting	53.00 to	54.00
No. 1 dealer bundles	80.00 to	81.00
No. 1 factory bundles	78.00 to	79.00
No. 2 bundles	31.00 to	32.00
No. 1 busheling	70.00 to	71.00
Machine shop turnings	20.00 to	21.00
Shoveling turnings	20.00 to	21.00
Cast iron borings	20.00 to	21.00
Cut structural & plates, 5 ft. and under	71.00 to	72.00
Cut structural & plates, 2 ft. and under	92.00 to	93.00
Low phos. punchings plate	92.00 to	93.00
Foundry steel, 2 ft. & under	54.00 to	55.00
No. 1 RR hvy. melting	60.00 to	61.00
Rails, 2 ft. and under	89.00 to	90.00
Rails, 18 in. and under	91.00 to	92.00
No. 1 machinery cast	80.00 to	81.00
Mixed cast	47.00 to	48.00
Stainless		
18-8 bundles	450.00 to	460.00
18-8 turnings	335.00 to	345.00
430 bundles	120.00 to	130.00

Buffalo

Brokers buying prices per gross ton on cars:

No. 1 hvy. melting	$ 53.00 to	$ 54.00
No. 2 hvy. melting	43.00 to	44.00
No. 1 busheling	71.00 to	72.00
No. 1 dealer bundles	71.00 to	72.00
No. 2 bundles	32.00 to	33.00
Machine shop turnings	13.00 to	14.00
Mixed boring and turnings	13.00 to	14.00
Shoveling turnings	19.00 to	20.00
Cast iron borings	27.00 to	28.00
Low phos. plate	78.00 to	79.00
Structural and plate, 2 ft. and under	79.00 to	80.00
Rails, 2 ft. and under	79.00 to	80.00
Scrap rails, random lgth	61.00 to	62.00
No. 1 machinery cast	74.00 to	75.00
No. 1 cupola cast	71.00 to	72.00

St. Louis

No. 1 hvy. melting	$ 70.00 to	$ 71.00
No. 2 hvy. melting	58.00 to	59.00
No. 1 busheling	80.00 to	81.00
No. 1 dealer bundles	82.00 to	83.00
No. 2 bundles	56.00 to	57.00
Machine shop turnings	17.00 to	18.00
Shoveling turnings	21.00 to	22.00
Cast iron borings	27.00 to	28.00
No. 1 RR hvy. melting	79.00 to	80.00
Rails, random length	72.00 to	73.00
Rails, 5 ft. and under	86.00 to	87.00
RR specialties	79.00 to	80.00
Cupola cast	66.00 to	67.00
Heavy breakable cast	40.00 to	41.00
Stove plate	85.00 to	86.00
Steel car wheels	85.00 to	86.00
Rerolling rails	99.00 to	100.00
Unstripped motor blocks	49.00 to	50.00

Birmingham

No. 1 hvy. melting	$ 70.00 to	$ 71.00
No. 2 hvy. melting	66.00 to	67.00
No. 1 dealer bundles	70.00 to	71.00
No. 2 bundles	46.00 to	47.00
No. 1 busheling	70.00 to	71.00
Shredder scrap	88.00 to	89.00
Machine shop turnings	23.00 to	24.00
Shoveling turnings	36.00 to	37.00
Cast iron borings	36.00 to	37.00
Electric furnace bundles	67.00 to	68.00
Elec. furnace, 3 ft. & under	70.00 to	71.00
Structural and plate, 2 ft.	89.00 to	90.00
Structural and plate, 4 ft.	83.00 to	84.00
No. 1 RR hvy. melting	83.00 to	84.00
Scrap rails, random lgth	73.00 to	74.00
Rails, 2 ft. and under	90.00 to	91.00
Angles and splice bars	83.00 to	84.00
No. 1 cupola cast	82.00 to	83.00
Unstripped motor blocks	72.00 to	73.00

Cincinnati

Brokers buying prices per gross ton on cars:

No. 1 hvy. melting	$ 50.00 to	$ 51.00
No. 2 hvy. melting	49.00 to	50.00
No. 1 dealer bundles	72.00 to	73.00
No. 2 bundles	32.00 to	33.00
Machine shop turnings	9.00 to	10.00
Shoveling turnings	12.00 to	13.00
Cast iron borings	19.00 to	20.00
Low phos. 18 in. and under	77.00 to	78.00
Rails, random length	59.00 to	60.00
Rails, 2 ft. and under	75.00 to	76.00
No. 1 cupola cast	64.00 to	65.00
Heavy breakable cast	25.00 to	26.00
Drop broken cast	68.00 to	69.00

New York

Brokers buying prices per gross ton on cars:

No. 1 hvy. melting	$ 38.00 to	$ 40.00
No. 2 hvy. melting	31.00 to	32.00
No. 2 dealer bundles	20.00 to	22.00
Mixed borings and turnings	10.00 to	11.00
Machine shop turnings	4.00 to	6.00
Shoveling turnings	10.00 to	12.00
Clean cast, chem. borings	35.00 to	36.00
No. 1 machinery cast	79.00 to	80.00
Mixed yard cast	50.00 to	51.00
Heavy breakable cast	10.00 to	12.00
Stainless		
18-8 prepared solids	420.00 to	440.00
18-8 turnings	320.00 to	340.00
430 prepared solids	90.00 to	100.00
410 solids	75.00 to	85.00

Boston

Brokers buying prices per gross ton on cars:

No. 1 hvy. melting	$ 49.00 to	$ 51.00
No. 2 hvy. melting	39.00 to	41.00
No. 1 dealer bundles	50.00 to	52.00
No. 2 bundles	32.00 to	34.00
No. 1 busheling	56.00 to	58.00
Shredder scrap	59.00 to	61.00
Machine shop turnings	12.00 to	14.00
Shoveling turnings	18.00 to	20.00
No. 1 machinery cast	72.00 to	77.00
Mixed cupola cast	44.00 to	46.00
Heavy breakable cast	8.00 to	10.00

San Francisco

No. 1 hvy. melting	$ 40.00 to	$ 42.00
No. 2 hvy. melting	34.00 to	36.00
No. 1 dealer bundles	31.00 to	33.00
No. 2 dealer bundles	20.00 to	21.00
Machine shop turnings	8.00 to	9.00
Cast iron borings	8.00 to	9.00
No. 1 cupola cast	80.00 to	82.00

Los Angeles

No. 1 hvy. melting	$ 34.00 to	$ 36.00
No. 2 hvy. melting	28.00 to	30.00
No. 1 dealer bundles	26.00 to	28.00
No. 2 dealer bundles	16.00 to	18.00
Machine shop turnings	9.00 to	10.00
Shoveling turnings	10.00 to	11.00
Cast iron borings	8.00 to	9.00
Elec. furnace, 1 ft. and under (foundry)	67.00 to	69.00
No. 1 cupola cast	72.00 to	74.00

Seattle

No. 1 hvy. melting	60.00 to	62.00
No. 2 hvy. melting	51.00 to	53.00
No. 2 bundles	35.00 to	37.00
No. 1 cupola cast	89.00 to	90.00
Mixed yard cast	81.00 to	82.00

Hamilton, Ont.

Brokers buying prices per gross ton on cars:

No. 1 hvy. melting	$ 74.00
No. 2 hvy. melting, cut 2 ft. and under	66.00
No. 1 dealer bundles	82.00
No. 2 bundles	58.00
Mixed steel scrap	53.00
Bush. new fact. prep'd	77.00
Bush. new fact. unprp'd	60.00
Machine shop turnings	30.00
Short steel turnings	30.00
Mixed borings and turnings	19.00
Cast scrap	97.00

Houston

Brokers buying prices per gross ton on cars:

No. 1 hvy. melting	$ 62.00 to	$ 63.00
No. 2 hvy. melting	52.00 to	53.00
No. 2 bundles	33.00 to	34.00
Machine shop turnings	13.00 to	14.00
Crushed turnings	24.00 to	25.00
Shredder scrap	70.00 to	71.00
Cut structural plate, 2 ft. and under	88.00 to	89.00
Cut structural plate, 5 ft. and under	70.00 to	71.00
Unstripped motor blocks	54.00 to	55.00
Cupola cast	81.00 to	82.00

A RALLY IN ORDERS? NO, NOT YET

Orders received by durable goods producers rose 4.1 pct in July. This brought the dollar volume of orders for the month to $106.9 billion.

That sounds like real good news, but it probably isn't.

In the first place, about 80 pct of the month-to-month gain was due to a big jump in orders for defense-related capital goods. These orders rose to $10.3 billion, up from June's $7.3 billion. But these big-tag defense orders tend to yo-yo wildly. The pattern over the past two months was typical; orders were up 40 pct in July after falling 13 pct in June.

In July, orders for nondefense capital goods rose about 4 pct to $27.4 billion. And the seven month picture for these orders this year shows a decline of 0.2 pct from the same period in 1985.

One economist has said the economy "has done a kind of stutter-step over the past three to four months." And that stutter-step, apparently, has carried right down to the flow of orders in industry. For example, orders received in July by producers of transportation equipment were up 22 pct. In June, these orders were down 16 pct.

So, between roller-coaster defense orders, and the stutter-step economy, it has been hard to get a bearing on the real strength of orders.

It is now more important than ever to look beyond month-to-month data to get such a bearing. Case in point: While the July 4.1 pct rise in overall durable goods new orders at first appeared to be heartening news, it has to be kept in mind that these orders were still some $1.5 billion less than the order volume back in the opening month of the year.

Billions of Dollars, Seasonally adjusted Monthly Total, unless otherwise noted Source: U.S. Dept of Commerce		Latest Month or Qtr	Previous Month or Qtr	Same Period Year Ago
CAPITAL EXPENDITURES (Annual Rates)				
U.S. Industry, Total	3rd Q*	$388.9	$387.4	$388.9
Manufacturing, Total	3rd Q*	148.5	148.0	154.0
Manufacturing, Durable Goods	3rd Q*	71.4	72.2	72.9
Mining Industry	3rd Q*	12.5	12.6	15.9
KEY INDICATORS, Durable Goods Manufacturing				
New Orders	July	106.9	102.7	104.4
Shipments	July	105.5	104.6	102.5
Inventories	July	186.7	187.1	192.2
Unfilled Orders	July	355.3	353.9	351.1
NEW ORDERS, METALWORKING				
Capital Goods Producers, Nondefense Industries	July	27.4	26.4	26.7
Capital Goods Producers Defense Industries	July	10.5	7.3	9.6
Primary Metals, Total	July	9.1	9.3	10.6
Steel (SIC 331)	July	3.7	3.8	4.5
Iron & Steel Castings (SIC 332)	July	1.0	1.1	1.2
Nonferrous Metals	July	4.3	4.4	4.9
Nonelectrical Mach.-Equip. Industries, Total	July	17.2	16.9	17.5
Engines & Turbines	July	1.0	1.2	1.3
Farm Mach.& Equipment (Shipments)	July	0.7	0.8	0.8
Construction, Mining & Mat. Hdlg. Equip	July	2.6	2.4	3.0
General Industrial Machinery	July	1.5	1.6	1.5
Metalworking Machinery	July	0.8	0.7	1.0
Machine Tools, Total ($Mill.)**	July	189.2	201.2	199.8
Machine Tools, Metalcutting**	July	149.8	156.8	149.9
Machine Tools, Metalforming**	July	39.4	44.4	50.0
Electrical Mach. & Equip. Industries, Total	July	17.0	17.9	15.2
Elec. Transmission & Ind. Equip.	July	2.2	2.0	2.1
Household Appliances	July	1.6	1.5	1.4
Communication Equipment	July	5.9	7.0	5.0
Transportation Equipment, Total	July	26.7	23.5	26.7
Motor Vehicles & Parts (Shipments)	July	16.9	16.5	15.8
Aircraft, Missiles & Parts	July	9.5	5.3	9.3
Shipbuilding & Military Tanks	July	1.5	1.0	1.1
Fabricated Metal Products, Total	July	14.3	14.0	14.2
Instruments, Total	July	4.7	4.5	4.9

*Est. – Commerce Dept; **Source: NMTBA